

OTOLOGY.

UNDER THE CHARGE OF

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AN ANTHROPOLOGICAL STUDY OF THE AURICLE.

DR. J. GRADENIGO, of Italy, presented a paper on the above subject at the last International Congress of Otolology and Laryngology. (*Annales de Maladies de l'Oreille*, September, 1889.)

Two classes of individuals have been examined in these studies, viz., those termed normal individuals, and those classed as insane and criminal.

Besides a critical examination of 650 individuals (350 men, 300 women), Gradenigo examined 25,000 people cursorily, at Turin, viz., 15,000 men and 10,000 women, by a system of observation and noting in large crowds. These came under the first group of so-called normal people.

For the second group, the insane and criminal, necessarily fewer individuals were examined, as follows: 330 insane (180 men, 150 women), 76 crétins (50 men, 26 women), 120 typical criminals (82 men, 38 women).

The principal types were classified as follows:

I. Adherent lobes, simple or elongated; under this head is included absence of the lobule.

II. Prominent auricles (*oreilles à anse*), with varieties.

III. The "Wildermuth ear," in which the auricle is characterized by a prominence in the anthelix greater than that in the helix.

IV. The "Macacus ear," in which is found an uncurved and pointed helix at the upper posterior edge (something like the "pointed ear" of Darwin).

V. Combination of the adherent lobe with the prominent ear (*à anse*).

VI. Combination of the adherent lobe with the "Wildermuth ear."

The results are as follows:

	Men.	Women.
Adherent lobes . . .	28 per cent.	22 per cent.
Prominent ears (<i>à anse</i>) . .	12.15 "	6 "
Wildermuth ears . . .	6 "	9.12 "

Prominent ears, therefore, are half as frequent in women as in men, whereas the "Wildermuth ear" is more frequent in women. It is furthermore stated that the percentage of anomalies of the auricles varies according to the country, the city, the social position, and even the age. Thus prominent ears (*oreilles à anse*) are found in 25 per cent. of children, while in adults only 12.15 per cent.

INVESTIGATIONS AS TO THE HEARING OF SCHOOL CHILDREN.

The *British Medical Journal* of September 28, 1889, in commenting upon investigations of Dr. Thomas Barr, of Glasgow, as to the hearing of school

children, gives the following results of similar investigations in different countries:

	Children examined.	Found defective
Sexton, New York	570	13.00 per cent.
Weil, Stuttgart	4,500	33.37 "
Moure, Bordeaux	1,768	17.0 "
Bezold, Munich	1,885	22.0 "
Barr, Glasgow	600	27.66 "

Dr. Barr found "twice as many with defective hearing among backward children as among forward children." His conclusions are:

"1. Teachers should keep in view the fact that in every class of fifty children there are probably about a dozen or more who have some defect of the hearing, and are, therefore, placed at a disadvantage as compared with their normally hearing fellows.

"2. Children who are known to suffer from defective hearing should always occupy a position on the bench nearest the teacher; and if the defect is limited to one ear, the child should be placed so that the better ear shall be turned to the teacher.

"3. Children whose hearing is extremely defective, or who are totally deaf, should not be placed in the ordinary classes, but should be taught in a separate class by one who is qualified to teach the German method of articulate speech and lip-reading.

"4. In cases of children whose progress is unsatisfactory, and who are inattentive, dull, and idle, the capacity for hearing should be ascertained by proper tests, and if defective hearing is found, information of the fact should be sent to the parents, and the children's position in the class so arranged as to minimize the bad effects of defective hearing.

"5. If the ear disease from which a child suffers is attended by a discharge of matter from the interior of the ear, the child should cease to attend school until a doctor's certificate of fitness is furnished by the parents.

"6. In all schools the head-masters should issue stringent instructions to the assistants or pupil-teachers, that boxing the ears must never, on any account be practised on children.

"7. In the construction of new schools, it is desirable that the class-rooms should not exceed twenty feet in length or breadth, or better, that their shape should be that of a parallelogram, with a long side of twenty-five feet and a short side of fifteen feet, the teacher occupying the position of centre of one of the short sides, and that the number of scholars in one class and room should not exceed fifty. If, as is frequently the case, the teacher stands in the centre of the parallelogram, especially in a long room, the children to the right and left are badly situated for hearing.

"8. In the selection of a site for a new school, a position should be chosen as far removed as possible from noisy works or main thoroughfares; the class-rooms should be situated as far as practicable from the public streets, and they should not lead directly off main staircases.

"9. The wall separating class-room from class-room, or from a staircase, should be sufficiently thick, and of such material as to form bad conductors of sound. Wood, especially fir, is obviously unfitted for entering into the construction of such partition-walls.

"10. In order to guard against colds in the head, a common source of deafness in school children, class-rooms should be supplied with sufficient appliances for ventilation to do away with the necessity for opening windows when the class-rooms are occupied by the children."

ON APROSEXIA, BEING THE INABILITY TO FIX THE ATTENTION, AND
OTHER ALLIED TROUBLES IN THE CEREBRAL FUNCTIONS CAUSED BY
NASAL DISORDERS.

This was the title of an interesting paper read by DR. GUYE, of Amsterdam, in the Otological Section of the British Medical Association, at Leeds, August, 1889 (*British Medical Journal*, September 23, 1889). The author said that for a long time past he had "made a point of studying the impairment of the cerebral functions by disorders of the nose," and he has given the name of "aproxesia" to one of the symptoms, which seems to be, next to headache, the elementary and generally the initial symptom. Aproxesia is the inability to fix the attention on any definite, more or less abstract, subject. It is claimed that "it is with aproxesia as with giddiness in aural vertigo." If ear patients are asked whether they suffer from giddiness, the surgeon will receive an affirmative answer in many cases, perhaps in the majority. If he examine carefully he will find, where giddiness is present, a relation between it and the ear disease. So a number of cases of nasal obstruction may be treated on account of secondary aural or laryngeal lesions, but aproxesia will not be found out unless inquired for. The aurist will be astonished at the number of cases of aproxesia if he inquires for them. It is of more importance still that medical men in general practice be impressed with the frequency of that relation, and that they make it a rule in every case of habitual headache and inability to work, and loss of memory, to inquire after the state of the nose, and to ascertain if the normal nasal respiration be not impeded, and habitually or temporarily superseded by breathing through the mouth.

A number of cases are then given of headache and inability to study, cured permanently by local treatment of the nose and naso-pharynx, which restores the normal nasal respiration. The majority of cases were boys and young men.

Aproxesia as a symptom of cerebral exhaustion is thus explained by Guye: This exhaustion must be due either to the fact that the nutrient matter required for repair in the brain is not sufficiently procured or assimilated, or the products of the "tissue-change" which have to be eliminated are incompletely removed. This removal will have to take place, partly, at least, by means of the lymph vessels. Now, large lymph vessels leave the cerebral cavity, together with the fibres of the olfactory nerve. "It is highly probable that structural changes in the nasal mucous membrane, and especially such as will exert pressure on the lymphatics, will impair or prevent the current of the cerebral lymph through the nasal mucous membrane. The retention of the products of the chemical processes in the tissues of the brain will lead to results which we may expect to be the same as those of physiological exhaustion—that is, fatigue."

Beside structural changes, local hyperæmia, often seen as a nasal reflex, will be apt to produce the same pressure on the lymphatics.

Headache, often found in disorders of the nose, is thus explained: "The air contained in the cavities communicating with the nose will be reabsorbed, and so its pressure diminished, as soon as its free communication with the nose is impaired by the swelling of the mucous membrane inducing a hyperæmia *in vacuo*."

Three forms of aprosexia are enumerated—viz.: 1. Physiological aprosexia, the result of cerebral overexertion or fatigue. 2. Neurasthenic aprosexia, where the cerebral exhaustion is produced by abnormal irritability and restlessness; and, 3. Pure nasal aprosexia, where the exhaustion is produced by the retention of products of tissue-change. Then follow some directions as to treatment, consisting in the application of astringent sprays to the nose, cauterization of the turbinated bodies with nitrate of silver, and the removal of cartilaginous obstructions by surgical operation.

ON SOME CAUSES OF BACKWARDNESS AND STUPIDITY IN CHILDREN.

MR. WILLIAM HILL, of St. Mary's Hospital, London, read in the Section of Otolaryngology, British Medical Association, Leeds, August, 1889, a paper with the above title, and bearing on the subject of the foregoing paper. He said: "The fact that children the victims of nasal and pharyngeal obstruction often suffer from headaches, especially when engaged in study, and frequently evince marked inability to fix the attention on their lessons or work for any length of time, has in recent years led many to suspect that these symptoms were not altogether due to the deafness . . . but were in part a reflection of some evident hampering of the cerebral functions."

The author's views as to the physical origin of aprosexia agree with those of Guye. He goes a step further, however, in his explanation, as follows: "Ferrier has pointed out that extirpation of the prefrontal lobes in monkeys is followed by a marked impairment of the faculty of attention and observation, and it is not unreasonable to suppose that aprosexia and other symptoms associated with lymphoid overgrowths and obstructions in the nose and pharynx are the outcome of lymphatic and venous stagnation and tension in the structures occupying the anterior region of the cranium." He also found that idiots, excepting the hydrocephalic, with low, sloping foreheads, indicating a small size of the anterior lobes of the brain, are nearly all mouth-breathers, and victims of some form of nasal or pharyngeal obstruction. "Many are deaf, all are aprosexic."

He then propounds the question: "Do want of cerebral development on the one hand, and morbid conditions of the nose and pharynx on the other hand, in strumous and syphilitic subjects, have a casual or a causal relationship? Does lymphatic stagnation within the cranium, as the result of hypertrophy and abeyance of the secretory functions of the tonsils and other lymphoid glands of the nose and throat, interfere with cerebral development and function?" If this question can be answered in the affirmative, it behooves physicians to pay more attention to nasal and pharyngeal lymphoid obstruction in very young individuals, if the number of deaf stupid children is to be lessened.—*British Medical Journal*, September 28, 1889.